

Date: Tuesday, 17/02/2009 10:18:32 AM
 User: Julie Dawson

Process Sheet

| | |
|--|--|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : REPLACEMENT WINDOW ASSEMBLY |
| Job Number : 45816 | |
| Estimate Number : 11174 | |
| P.O. Number : | Part Number : D3290041 |
| This Issue : 17/02/2009 S.O. No. : | Drawing Number : D3290 REV C |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : / / Type : SMALL /MED FAB | Drawing Revision : C |
| Previous Run : 43863 | Material : |
| Written By : | Due Date : 03/03/2009 Qty: 6 Um: Each |
| Checked & Approved By : <u>JLD 09.02.07</u> | |
| Comment : Est. B 05.05.25 Added Step 11 KJ/JLM | |
| Est. C 06.05.09 Ecn 798 EC | |
| Est Rev:D Now on Waterjet 06-06-16 JLM | |
| Est rev E rev C dwg 07.09.28 EC verified by: DD | |

Additional Product

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

| | | |
|-----|-------------|--------------------|
| 1.0 | M6061T6S040 | 6061-T6 .040 Sheet |
|-----|-------------|--------------------|



Comment: Qty.: 3.9375 sf(s)/Unit Total : 23.6250 sf(s)

M6061T6S040 (M5052H32S.040)

Batch: 109058 * ml 09 03 02 (6)

| | | |
|-----|-----------|----------------|
| 2.0 | WATER JET | FLOW WATER JET |
|-----|-----------|----------------|



Comment: FLOW WATER JET

1-Cut as per Dwg D3290 (use prog. for D3290-1)

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

ml 09 03 02 (6)

| | | |
|-----|-----|--|
| 3.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|



ml 09 03 02



(6)

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

| | | |
|-----|-----|--------------|
| 4.0 | QC8 | SECOND CHECK |
|-----|-----|--------------|



Comment: SECOND CHECK

S 09/03/02 (x6)

| | | |
|-----|-----------------|----------------------------|
| 5.0 | HAND FINISHING1 | HAND FINISHING RESOURCE #1 |
|-----|-----------------|----------------------------|



(x6)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

emp / BR.

09/03/02

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Tuesday, 17/02/2009 10:18:32 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: REPLACEMENT WINDOW ASSEMBLY

Job Number: 45816

Part Number: D3290041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

POWDER COATING

POWDER COATING



m109996



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

6:30

OVEN TEMPERATURE:

320°

FINISH TIME:

6:20:00

FL 09/03/03

⑥

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BR 09-03-3 ⑥

8.0

D2126

Seal



Comment: Qty.: 6.5000 f(s)/Unit Total : 39.0000 f(s)

Locking Seal

Pick:

Qty Part Number Description Batch

1 D2126-0780 Locking Seal

D42154

FL

9.0

D32903

Window



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Window

Pick:

Qty Part Number Description Batch

1 D3290-3 Window

42413
B34393

8509/03/03 X6

-3 *

10.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D3290

Clean D3290-041 and place in plastic wrap

BR 09-03-31 ⑥

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

508/03/31 ⑥

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Tuesday, 17/02/2009 10:18:33 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: REPLACEMENT WINDOW ASSEMBLY

Job Number: 45816

Part Number: D3290041

Job Number:



| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|
|---------|-----------------------|---------------|

12.0

PACKAGING 1

PACKAGING RESOURCE #1



(W)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 29

9/3/31

50

13.0

QC21

FINAL INSPECTION/W/O RELEASE



09/04/03

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



mf 09-04-02

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

| | | |
|----------------------------------|---------------|-----------------------------|
| DART AEROSPACE LTD | | Work Order: H5810 |
| Description: Window Frame | | Part Number: D3290-1 |
| Inspection Dwg: D3290 | Rev: C | Page 1 of 1 |

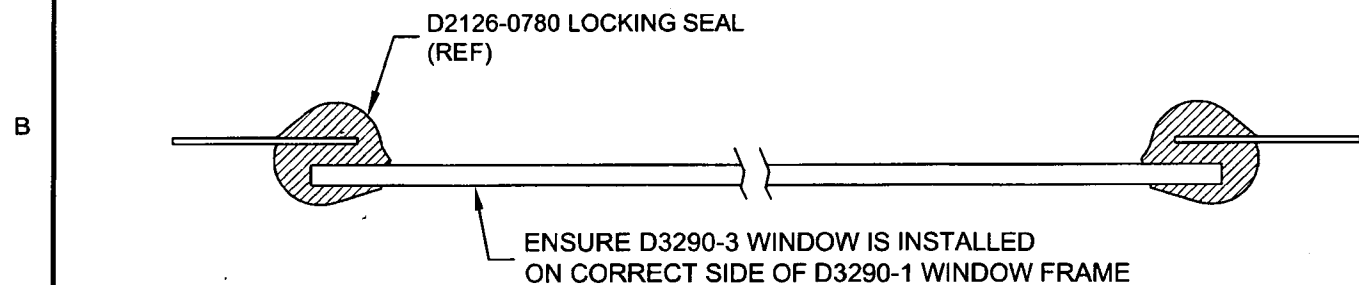
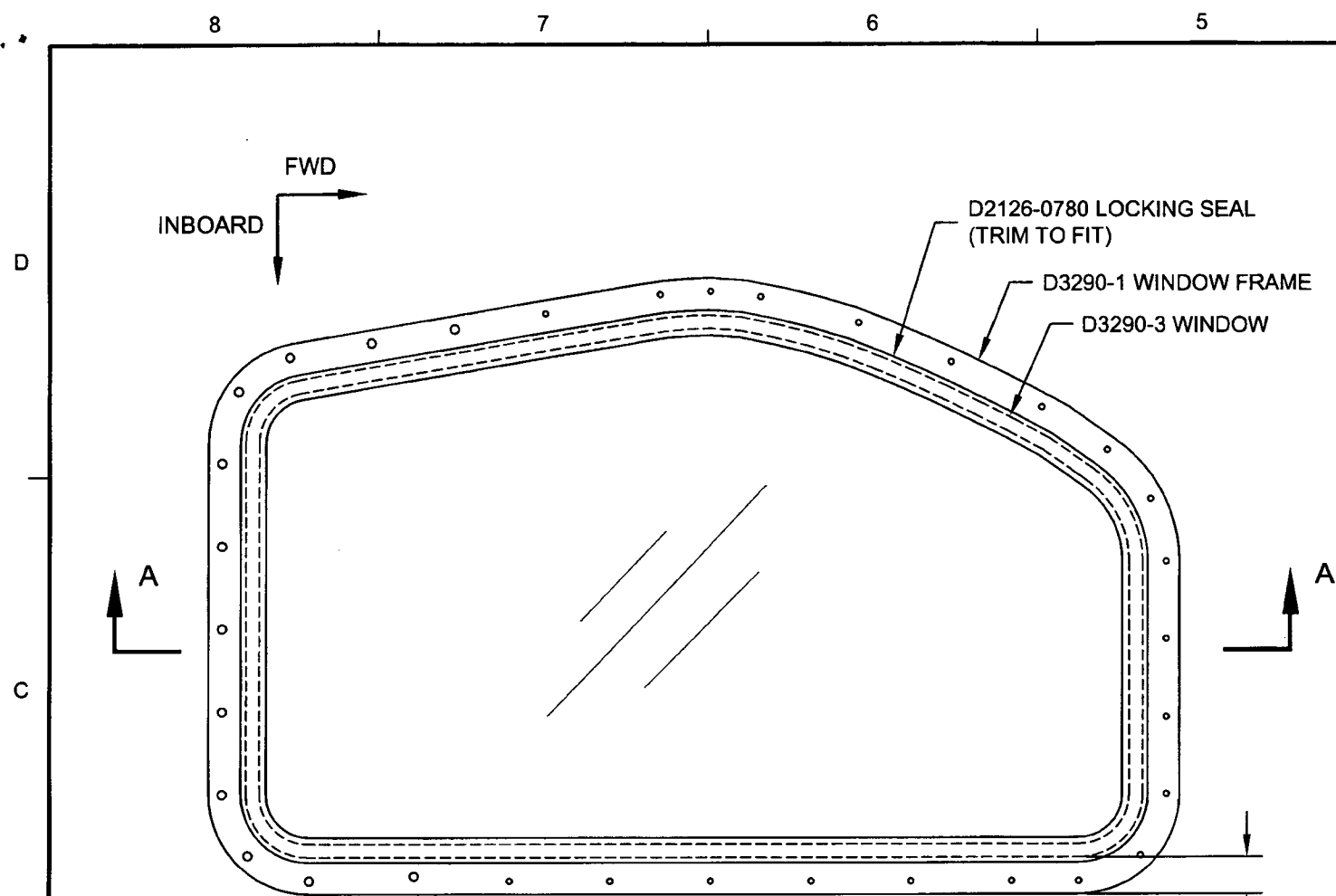
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| 29.00 | +/-0.030 | 29.00 | ✓ | | M-T | |
| 14.00 | +/-0.030 | 14.00 | ✓ | | M-T | |
| Ø0.171 | +0.005/-0.001 | 0.171 | ✓ | | VARN | |
| 1.50 | +/-0.030 | 1.502 | ✓ | | VARN | |
| 1.11 | +/-0.030 | 1.11 | | | VARN | |
| 10.10 | +/-0.030 | 10.10 | ✓ | | M-T | |
| 18.50 | +/-0.030 | 18.50 | ✓ | | M-T | |
| 0.040 | +/-0.010 | 0.037 | ✓ | | VARN | |
| R3.00 | +/-0.030 | 3.00 | ✓ | | R-G | |
| R4.50 | +/-0.030 | 4.50 | ✓ | | R-G | |
| Ø0.257 | +0.006/-0.001 | 0.257 | ✓ | | VARN | |
| 13.61 | +/-0.030 | 13.61 | ✓ | | M-T | |
| | | | | | | |
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|-------------------------|-----------------------|----------------------------|-----|
| Measured by: M.M | Audited by: S | Prototype Approval: | N/A |
| Date: 09.03.02 | Date: 09/03/02 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---------------------------------|------------|----------|
| A | 06.09.19 | New Issue P/O D3290-041 | KJ/JLM | |
| B | 07.07.18 | 13.61 dimension removed | KJ/JLM | |
| C | 07.09.28 | Dimensions update per Dwg Rev C | KJ/EC/DD | BE |



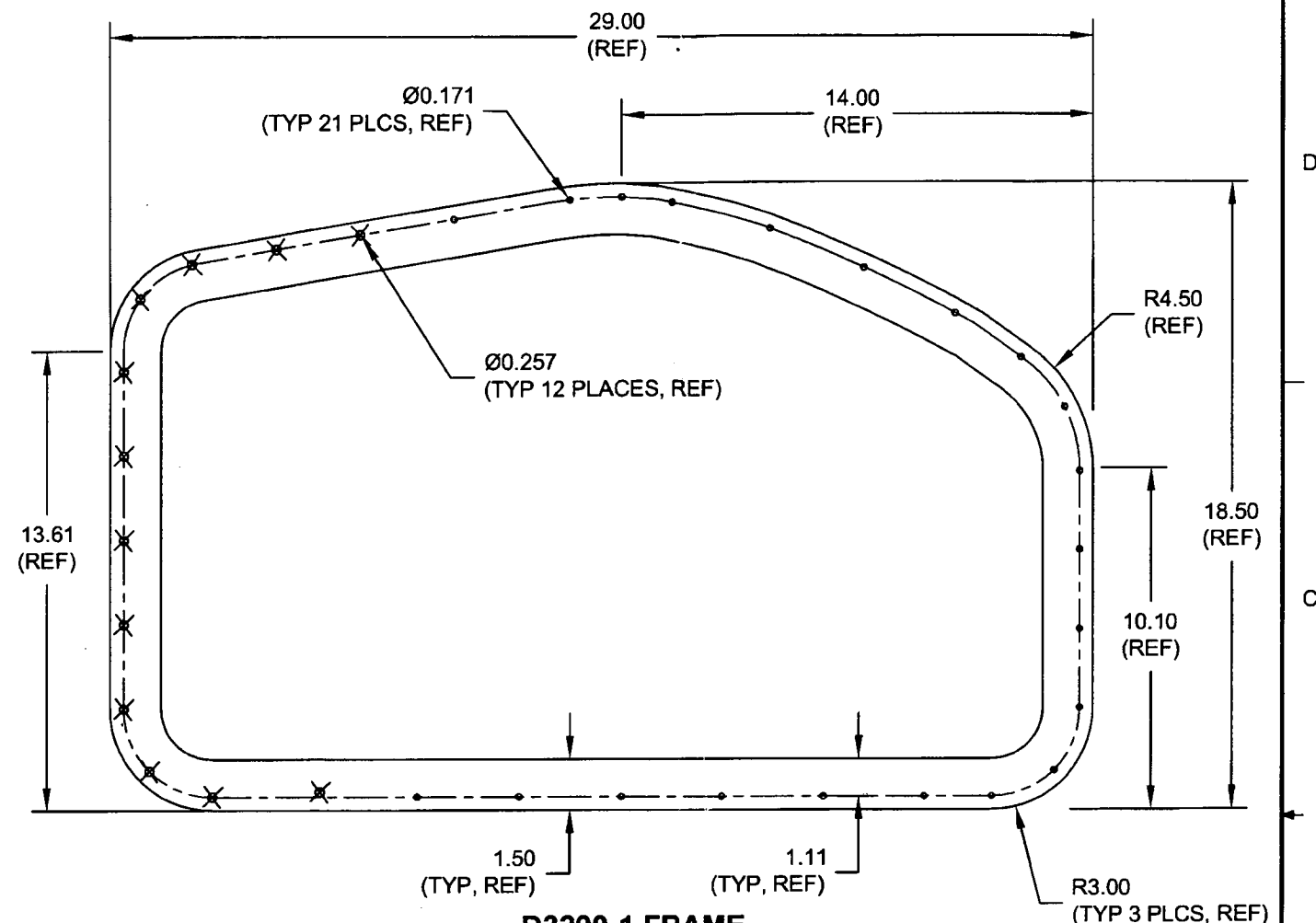
SECTION A-A
NTS

D3290-041 REPLACEMENT WINDOW ASSEMBLY

D3290-041 NOTES:
1) WEIGHT: 3.66 LBS

GENERAL NOTES:

- 1) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) UNITS: INCHES UNLESS OTHERWISE NOTED



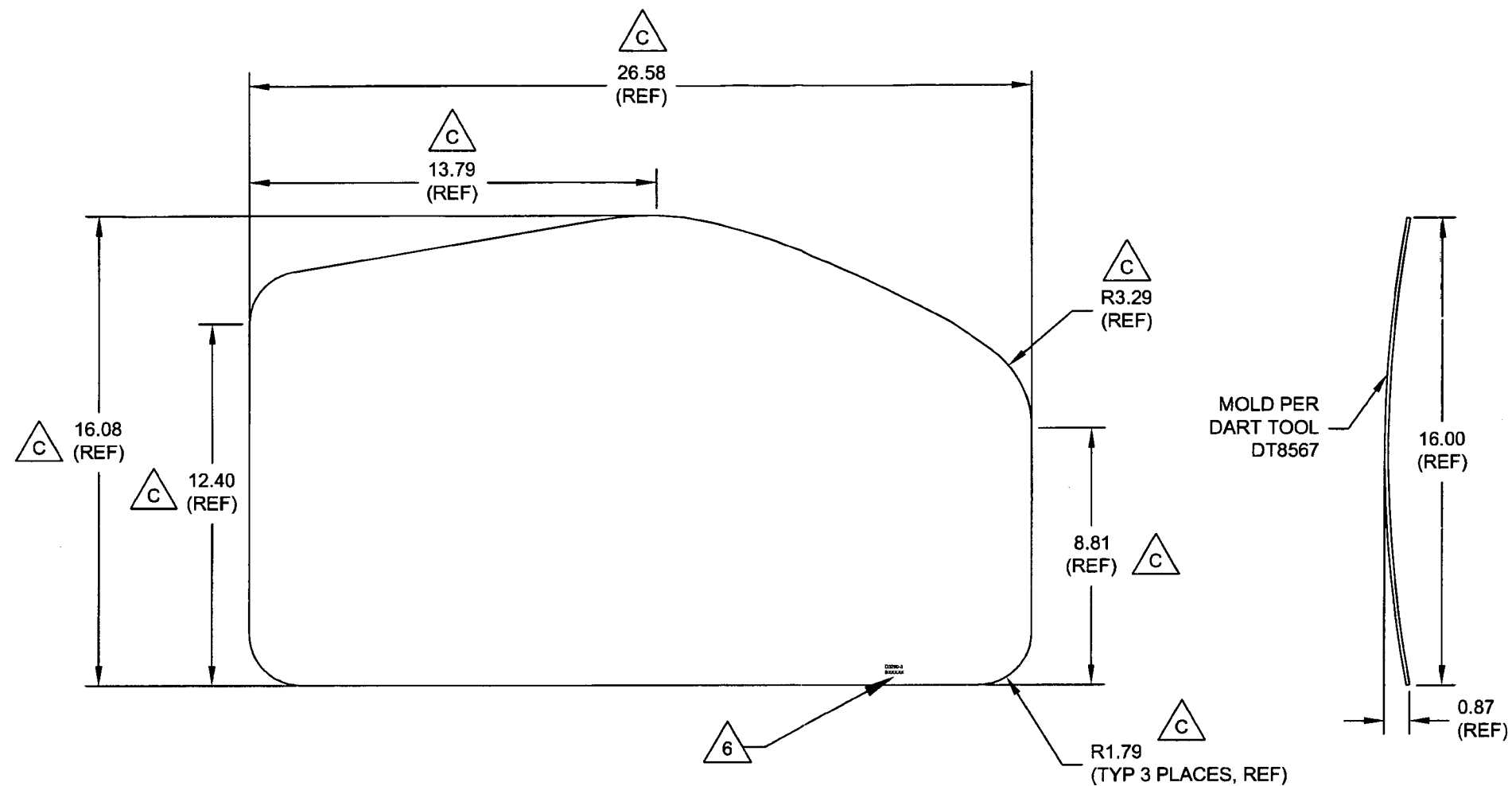
D3290-1 FRAME

D3290-1 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027
(REF. DART SPEC. M6061T6S.040)
OR
5052-H32 ALUMINUM SHEET 0.040 THICK
PER AMS-QQ-A-250/8 OR AMS 4016
(REF. DART SPEC. M5052H32S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1
POWDER COAT WHITE (REF. 4.5.3.1) PER DART QSI 005 4.3
- 3) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 4) IDENTIFICATION: IDENTIFY WITH DART P/N "D3290-1" USING FINE POINT PERMANENT INK MARKER
- 5) WEIGHT: 0.47 LBS

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4587

| C | UPDATE DIMS PER PAR 188 | DC | 07.07.24 |
|------------|-----------------------------|--|--------------|
| B | UPDATE MATERIAL PER NCR 029 | MB | 06.04.20 |
| A | NEW ISSUE | RF | 04.06.14 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | <i>[Signature]</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | <i>[Signature]</i> | | |
| CHECKED | <i>[Signature]</i> | DRAWING NO. | REV. C |
| MFG. APPR. | <i>[Signature]</i> | D3290 | SHEET 1 OF 2 |
| APPROVED | <i>[Signature]</i> | TITLE | SCALE |
| DE APPR. | <i>[Signature]</i> | REPLACEMENT WINDOW ASSEMBLY | 1:5 |
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D3290-3 WINDOW

D3290-3 NOTES:

- 1) MATERIAL: POLYCAST II CLEAR ACRYLIC SHEET PER MIL-P-5425
OR PLEXIGLAS G CLEAR CAST ACRYLIC SHEET PER
LP-391 TYPE 1 GRADE C, 0.125 THICK
(REF. DART SPEC. M-ACRYLIC-S.125)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) REMOVE SHARP EDGES
- 6) IDENTIFICATION: ENGRAVE P/N "D3290-3" AND B/N ON LOWER EDGE
USE 0.125" HIGH LETTERS TO MAXIMUM DEPTH OF 0.005"
- 7) WEIGHT: 1.87 +/- 0.42 LBS
- 8) MOLD PER DART TOOL DT8567

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07.09.22

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| DRAWN | JE | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | JE | DRAWING NO. | REV. C |
| MFG. APPR. | JE | D3290 | SHEET 2 OF 2 |
| APPROVED | JE | TITLE | SCALE |
| DE APPR. | JE | REPLACEMENT WINDOW ASSEMBLY | 1:5 |
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